Application No. 10/525,647

Response to Office Action dated November 14, 2006

Paper dated April 16, 2007

Attorney Docket No. 4559-045632

REMARKS

Claims 19-49 are pending in the instant application, and have been

amended. Particularly, claim 19 has been amended and claims 26-29, 32-35 and 49 have

been cancelled. Additionally, the specification has been amended. No new matter has

been added by this Amendment. Based on the above amendments and the remarks,

Applicants respectfully submit that the instant application is in condition for allowance

and request reconsideration of pending claims 19-48.

Objection to Specification

The specification has been amended to remove the embedded hyperlink

shown on page 3 lines 32-34 of the specification. As such, Applicants respectfully

request that the objection to the specification be withdrawn.

Objection to Claims under 37 C.F.R. § 1.75

Claims 26-29 and 32-35 stand objected to under 37 C.F.R. § 1.75 as being

duplicative. Those claims have been cancelled. As such, Applicants respectfully request

that this objection be withdrawn because it is now moot.

Rejection Based on 35 U.S.C. § 112, Second Paragraph

Claim 49 stands rejected under 35 U.S.C. § 112, second paragraph. Since

claim 49 has been cancelled, this rejection is now moot. As such, Applicants respectfully

request the withdrawal of this rejection.

Rejection Based on 35 U.S.C. § 112, First Paragraph, Written Description

Claim 49 stands rejected under 35 U.S.C. § 112, first paragraph. Since

claim 49 has been cancelled, this rejection is now moot. As such, Applicants respectfully

request that the Examiner withdraw this rejection.

Claims 19, and 21-48 also stand rejected under 35 U.S.C. § 112, first

paragraph, as failing to comply with the written description requirement. In pertinent

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part, claim 19 has been amended to recite "an isolated nucleic acid sequence comprising the sequence of SEQ ID NO: 18 or a nucleic acid sequence complementary to the sequence of SEQ ID NO: 18" and "an isolated nucleic acid sequence of at least 15 nucleotides in length specifically hybridizing under stringent conditions with the sequence of SEQ ID NO: 18." Claim 19, as amended, does not claim dinucleotide sequences of SEQ ID NO: 18.

Additionally, claim 19, as amended, is fully described in the Specification. Claim 19 is directed to nucleic acid variants of SEQ ID NO: 18, all of which are capable of hybridizing to a nucleic acid having the sequence of SEQ ID NO: 18 and which in turn serve the same promoter function. These nucleic acids are described throughout the specification, for example see page 4 lines 19-25, page 5 lines 32-35, page 6 lines 1-27, and page 7 lines 23-29.

For these reasons, Applicants respectfully submit that claims 19 and 21-48 comply with the written description requirement as set forth in 35 U.S.C. § 112, first paragraph, and request reconsideration and withdrawal of this rejection.

Rejection Based on 35 U.S.C. § 112, First Paragraph, Enablement

Claims 19 and 21-48 also stand rejected under 35 U.S.C. § 112, first paragraph for lack of enablement. As stated above, claim 19, as amended, does not claim dinucleotide sequences of SEQ ID NO: 18, and is directed to nucleic acid variants of SEQ ID NO: 18. Thus, for the same reasons discussed above, Applicants respectfully submit that the instant application complies with the enablement requirement as set forth in 35 U.S.C. § 112, first paragraph, and request reconsideration of this rejection.

Rejection Based on 35 U.S.C. § 102

Claims 19 and 21-49 stand rejected as anticipated by Evans et al. (1992, Plant Mol. Biol. 20:1019-1028). The Examiner asserts that the claim 19, as examined, claimed any dinucleotide sequence in SEQ ID NO: 18, and concludes that the CaMV 35S promoter "certainly comprises at least one dinucleotide sequence found within SEQ ID NO: 18." As discussed above, claim 19, as amended, does not claim dinucleotide sequences of SEQ ID NO: 18. For this reason, Applicants respectfully submit that the claimed invention is novel over Evans, and request reconsideration of this rejection.

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sequences of SEQ ID NO: 18. For this reason, Applicants respectfully submit that the claimed invention is novel over Evans, and request reconsideration of this rejection.

Rejection Based on 35 U.S.C. § 103

Certain claims stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over Sasaki et al. (2001, Genbank accession:AP004004) in view of Wu et al. (2002, Genbank accession:AF41859), in further view of Padgette et al. (1995, Crop. Sci, 35:1451-1461), and in further view of An et al. (1986, Plant Physiol. 81:301-305). Applicants traverse this rejection because the claimed invention is not obvious in view of the cited references.

Specifically, the cited references do not teach or suggest that SEO ID NO: 18 is a promoter, nor is there any motivation in the references to combine the references. Sasaki discloses the sequence of Oryza sativa (japonica cultivar-group) chromosome 6, which purportedly includes SEQ ID NO: 18, but does not teach or suggest that any portion of that sequence acts as a promoter. Wu discloses a messenger RNA sequence for HMG1 or HMGB1 from O. sativa, but does not teach or suggest the promoter for HMG1. Even assuming that motivation to combine the references exists, the mRNA sequence disclosed in Wu is from a eukaryotic organism, which does not make the DNA sequence of the promoter region for that gene obvious to one skilled in the art. Additional burdensome experimentation would be necessary to identify the promoter region for the gene encoded by the mRNA sequence disclosed in Wu. For example, in order to find the gene in the sequence disclosed in Sasaki, one must first discover transcribed sequences of DNA that have been spliced in forming the mRNA sequence disclosed in Wu. Then, one must conduct further burdensome experimentation to identify the promoter region for that DNA sequence. These deficiencies are not overcome by Padgette or An.

Furthermore, Wu does not contain any motivation to be combined with any other reference because it only identifies the HMG1 mRNA sequence without identifying the chromosome where that the gene resides or any suggestions of how to identify the DNA promoter sequence for the disclosed mRNA sequence. Likewise,

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Sasaki only identifies a long DNA sequence without disclosing any genes found on that chromosome, or identifying any mRNA sequences that are transcribed from that chromosome. Thus, Sasaki fails to motivate one skilled in the art to combine the sequence disclosed by Sasaki with any reference, particularly a reference disclosing an mRNA sequence transcribed from an unknown chromosome.

For these reasons, the Applicants respectfully submit that the claimed invention is not obvious in view of the references cited, and request reconsideration and withdrawal of this rejection.

Conclusion

In view of the foregoing amendments and remarks, the Applicants respectfully submit that all pending claims in the instant application are novel over the prior art and are in condition for allowance. Accordingly, reconsideration and withdrawal of the rejections and objections, and a notice of allowance are respectfully requested.

Respectfully submitted,

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